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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,372	12/12/2001	Keiichi Nakatsugawa	FUJZ 19.241	2888
26304	7590	03/21/2006	EXAMINER	
KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585				DYKE, KERRI M
		ART UNIT		PAPER NUMBER
		2616		}

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/015,372	NAKATSUGAWA ET AL.	
	Examiner	Art Unit	
	Kerri M. Dyke	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 December 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-25 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 22-24 is/are allowed.
- 6) Claim(s) 1-7 and 25 is/are rejected.
- 7) Claim(s) 8-21 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12 December 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/12/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-7 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Inoue et al. (US 6,515,974).

4. In regards to claim 1, Inoue discloses a mobile node supporting router (packet relay device 4) comprising: a home link interface connected to a home link of a mobile node (column 5 lines 59-60); and a foreign link interface connected to a foreign link of the node (column 5 lines 60-61); the foreign link interface having an encapsulating cache for storing binding information of the node (column 5 lines 62-66) and a processor for encapsulating a packet addressed to the node with a care-of address included in the binding information (column 5 line 66 – column 6 line 12). Column 4 lines 13-25 state that the purpose of the invention is to extend Mobile IP across networks with different address spaces. Additionally, column 15 lines 10-20 discloses that the connection is maintained when the node moves across networks. In order to

maintain the connection the packet relay device must maintain the original addressing and therefore must encapsulate the packets moving between the networks.

5. In regards to claim 2, Inoue discloses the mobile node supporting router as claimed in claim 1 wherein the binding information comprises information associating a home address of the node with a care-of address at a time of moving (column 11 lines 30-35 and lines 60-67).

6. In regards to claim 3, Inoue discloses the mobile node supporting router as claimed in claim 2 wherein the binding information associates an output interface which outputs the encapsulated packet with the care-of address (column 12 lines 63-65 discloses that the output interface GW-p is associated with the care-of address).

7. In regards to claim 4, Inoue discloses the mobile node supporting router as claimed in claim 1 wherein the binding information includes a lifetime of the binding information itself (column 14 lines 61-65 discloses a lifetime for the binding information).

8. In regards to claim 5, Inoue discloses the mobile node supporting router as claimed in claim 1 wherein the processor transmits the encapsulated packet to an output interface through a packet transfer route (The packet must travel a route in order to reach the output interface and such a route may inherently be called a packet transfer route.).

9. In regards to claim 6, Inoue discloses the mobile node supporting router as claimed in claim 3 wherein the processor provides the encapsulated packet to the output interface (column 12 lines 26-29 disclose that the packet relay device forwards the message to the appropriate agent after encapsulation).

10. In regards to claim 7, Inoue discloses the mobile node supporting router as claimed in claim 1 wherein when receiving a binding demand packet from the node, the processor stores the

binding information included in the binding demand packet in the encapsulating cache (column 12 lines 50-65 disclose the binding message process, including updating the table in cache in the fourth step).

11. In regards to claim 25, Inoue discloses the mobile node supporting router as claimed in claim 1 wherein the home agent is at least either on the home link or included in the home link interface (figure 6 shows that the home agent (element 5 or 6 depending on the direction of communication) is located on the home link within the network).

Allowable Subject Matter

12. Claims 22-24 are allowed.

13. Claims 8-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter:

a. Claim 22 is allowed because the home agent is still required to complete the message exchange. In order to communicate across the address spaces, the encapsulation is done in stages. The packet relay device completes one encapsulation in order to route the packet from the first network to the second network. The home agent performs a separate encapsulation in order to route from a node to the packet relay device and ultimately to the mobile node. Claims 23 and 24 depend from claim 22.

b. Claims 8 and 9 are allowable because the packet relay device does not provide a binding reply packet. Depending on the direction of traffic either home agent private or global (HA-p or HA-g) provides the reply packet.

c. Claim 10 is allowable because Inoue does not disclose a procedure or embodiment for what happens if the packet relay device does not store binding information. Claims 11-21 depend from claim 10.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wu et al. disclose distributing a location directory among internet access points so that the access point can optimally route the packet with consulting a mobile router. Leung discloses a router containing both a home and foreign agent.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kerri M. Dyke whose telephone number is (571) 272-0542. The examiner can normally be reached on Monday through Friday, 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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